

IN THE CLAIMS:

1-13. (Cancelled)

Claim 14 has been amended as follows:

14. (Currently Amended) An implantable cardiac stimulator comprising:

a pacing pulse generator configured to deliver pacing pulses to at least one chamber of a heart;

a high energy pulse generator configured to deliver at least one shock selected from the group consisting of cardioversion shocks and defibrillation shocks to at least one chamber of the heart;

sensing circuitry configured to interact with the heart to sense intrinsic cardiac activity and cardiac activity resulting from capture following a delivered pacing pulse; and

a control unit connected to said pacing pulse generator, said high energy pulse generator and said sensing circuitry that normally operates said pacing pulse generator in a first mode, including executing an autocapture mode, and that automatically switches said pacing pulse generator from operating in said first mode to operate in a second mode following delivery of a shock by said high energy pulse generator for a post-shock duration and, in said second mode, said control unit operating said pacing pulse generator with fixed settings for said pacing pulses and the control circuit does not operate the pacing pulse generator in the autocapture mode during the post-shock duration; and

said sensing circuitry also being configured to measure signal characteristics of said intrinsic cardiac activity signal following said shock, and wherein said control unit is configured to switch said pacing pulse generator back to said first mode after said post-shock duration, wherein the post-shock duration is extendable by said control unit, dependent on said characteristics of the sensed intrinsic cardiac activity following said shock, until the control unit determines that resumption of said autocapture mode in said first mode will be unaffected by said delivery of said shock.

Claim 15 has been cancelled.

15. (Cancelled)

Claim 16 has been amended as follows:

16. (Currently Amended) An implantable cardiac stimulator as claimed in claim ~~[[15]]~~ 14 wherein said ~~predetermined time interval~~ post-shock duration is in a range between one minute and fifteen minutes.

Claim 17 has been amended as follows:

17. (Currently Amended) An implantable cardiac stimulator as claimed in claim 16 wherein said ~~time interval~~ post-shock duration is in a range between five minutes and ten minutes.

Claim 18 has been cancelled.

18. (Cancelled)

Claim 19 has been amended as follows:

19. (Currently Amended) An implantable cardiac stimulator as claimed in claim 14 wherein said ~~extendable time interval~~ post-shock duration comprises a predetermined basic time interval, and wherein said sensing circuitry measures said signal characteristics prior to expiration of said basic time interval, and wherein said control unit extends said ~~extendable time interval~~ post-shock duration dependent on said characteristics, prior to said expiration of said basic time interval, by adding an extension time interval onto said basic time interval.

20. (Previously Presented) An implantable cardiac stimulator as claimed in claim 19 wherein said sensing circuitry continues to measure said characteristics prior to expiration of said extension time interval, and wherein said control unit, prior to said expiration of said extension time interval, adds a further extension time interval onto said extension time interval dependent on said characteristics.

21. (Previously Presented) An implantable cardiac stimulator as claimed in claim 19 wherein said extension time interval is in a range between five minutes and fifteen minutes.

22. (Previously Presented) An implantable cardiac stimulator as claimed in claim 21 wherein said extension time interval is approximately ten minutes.

23. (Previously Presented) An implantable cardiac stimulator as claimed in claim 19 wherein said basic time interval is in a range between one minute and fifteen minutes.

24. (Previously Presented) An implantable cardiac stimulator as claimed in claim 23 wherein said basic time interval is in a range between five minutes and ten minutes.

25. (Previously Presented) An implantable cardiac stimulator as claimed in claim 14 wherein said characteristics comprise an amplitude of said cardiac activity signal.

26. (Previously Presented) An implantable cardiac stimulator as claimed in claim 14 wherein said pacing pulse generator includes a pacing pulse delivery arrangement adapted to deliver said pacing pulses to a ventricle of the heart.

27. (Previously Presented) An implantable cardiac stimulator as claimed in claim 14 wherein said pacing pulse generator includes a pacing pulse delivery arrangement adapted to deliver said pacing pulses to an atrium of the heart.

28. (Previously Presented) An implantable cardiac stimulator as claimed in claim 14 wherein said high energy pulse generator includes a delivery arrangement adapted to deliver said shock to a ventricle of the heart.

29. (Previously Presented) An implantable cardiac stimulator as claimed in claim 14 wherein said high energy pulse generator includes a delivery arrangement adapted to deliver said shock to an atrium of the heart.